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ABSTRACT

Principals of 62 elementary and secondary rural schools in a 20-county area of the upper Cumberland region of Tennessee were surveyed about the status of rural school facilities and their accommodation of various curricular and extracurricular offerings. Small class size was reported by 58 percent. The high incidence of Internet-operable schools reflected a 2-year campaign to bring all Tennessee schools on-line. Areas of high compatibility between curricular and extracurricular offerings and school facilities included a safe and positive school climate, technology, meaningful extracurricular activities, satisfaction with curriculum offerings, and school location. Facility limitations that restricted programs and services included the following: lack of space and over-crowded classrooms; wiring and other infrastructure concerns that limited utilization of technology; inadequate science and computer laboratories; inadequate learning media centers; shortage of instructional equipment and materials; and inadequate maintenance. Data concerning construction or renovation during the last 5 years revealed that 12 principals moved into new school facilities. Major renovations, defined as projects costing $5,000 or more, were completed in 46 schools. Frequently listed improvements included outdoor athletic areas, renovated computer centers, library and media complexes, and changes in gymnasiums. Includes a list, provided by principals, of facility needs to accommodate future curricular and extracurricular offerings and four tables of survey data. (Contains 29 references.) (TD)

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A STUDY CONCERNING CURRICULAR AND EXTRACURRICULAR CONSIDERATIONS IN RURAL SCHOOLS

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Larry E. Peach

A STUDY CONCERNING CURRICULAR AND EXTRACURRICULAR CONSIDERATIONS IN RURAL SCHOOLS

The rural areas of our country account for more than one-fourth of our nation's population and most of our natural resources. In 1994-95, the greatest number of schools were in rural areas and served 26.6 percent of public school students. Almost half (49.0 percent) of the 14,400 districts in the nation served fewer than 1000 students (NCES, 1996). Maintaining viable living standards, quality educational opportunities, and economic vitality in rural areas is important to all Americans. Persons with more schooling tend to earn more, have better working conditions, and make better decisions about spending their money.

Rural schools traditionally are the focal points of their communities. In addition to providing general education programs, they serve as centers for extracurricular and community activities. The small, rural school is a resource for life-long learning and a means for delivering a wide range of educational and social services in smaller communities (Everson, 1994). Even so, some rural communities in North America struggle to maintain their small schools when governmental entities attempt to close small schools and create larger ones for the purpose of alleged cost-efficiency and curriculum breadth (DeYoung, 1995).

In the past, rural persons were likely to move to urban areas in search of better or higher paying jobs. However, in many rural communities, the trend of out-migration is reversing. A number of Americans are choosing to live and raise their children in a more traditional community environment, creating a "resettling of rural America"(Phelps, 1997). According to Gallagher (1998), the new American dream is to exit the corporate world for more satisfying work or a

more relaxed lifestyle, perhaps in a "pastoral locale." After decades of closing small rural schools with limited enrollment, rural schools are experiencing overcrowding resulting in the need to replace or renovate marginal structures. This population growth significantly impacts facilities, programs, and services provided by the schools. Quality educational opportunities make rural communities even more attractive to persons seeking relocation and provide rural citizens with choices for their futures. The resulting increase in human capital in rural communities impacts the economic and societal well being of individuals and the nation. Advocates of rural education postulate that developing and sustaining collaborative partnerships is necessary for community revitalization. Rural schools, in partnership with a solid support base of residents, can positively impact community vitality through expanded curricular and extracurricular offerings (Phelps, 1989).

Quality Rural Schools

Successful schools consistently exhibit certain discernible characteristics: clearly defined goals and objectives; a positive climate for learning; high expectations for student performance; competent leadership; a relevant curriculum; meaningful school-community partnerships; and adequate facilities and instructional materials (Wulf, 1997). The degree to which a school's program meets the national curriculum standards is another measure of school quality.

In this perspective, some observers of rural education identified several strengths of good rural schools including smaller class sizes that: facilitate individualized attention; increase opportunities for interpersonal relationships; enhance personal identity and commitment to the school; and maximize community support. Community residents have a stronger sense of school ownership when they perceive it to be a "good" school (Stephens, 1988). Recent national reports

reinforce the growing perception that small schools are good schools (Howley, 1996). A number of strengths of rural schools are similar to the characteristics found in effective schools research.

A relevant issue in a discussion of curricula and extracurricular considerations in rural schools is that of school size. Researchers have not reached consensus on an optimal size for schools. However, research reported by Kathleen Cotton (1996) indicates that an effective size for an elementary school is in the range of three hundred to four hundred students and that four hundred to eight hundred students is ideal for a secondary school. She further noted that it is size rather than ruralness that contributes to the affective and social benefits of small rural schools. Sergiovanni (1993) views schools as communities rather than organizations. He thinks that learning is nurtured over time and is not simply a product to be attained. He posits that an enrollment of 300 is optimal to sustain a true educational community. A number of rural schools exceed the student enrollment recommended in the research by Cotton. A considerable volume of research indicates that student achievement in small schools equals and possibly exceeds achievement in large schools (Fowler, 1995). Some of the benefits of smallness can be attained by creating learning communities within large schools (Cotton, 1996).

Craig Howley (1989) reported that when all factors are basically equal, comparisons of schools and school districts based on differences in enrollment generally favor smaller units. In a California study of both elementary and high schools, Friedkins and Necochea (1988) determined that community socioeconomic status directly affects student achievement. They found that students in lower socioeconomic conditions perform better in small schools, and students with high socioeconomic status do somewhat better in larger schools. Interestingly, the National Center for Education Statistics in Washington, D. C. found that dropout rates in rural schools are

lower than those in urban areas, and about the same as the dropout rate for more affluent suburban schools. Although there are obvious benefits to educating students in small, rural schools, policy makers continue encouraging the development of large high schools. Their position is that small high schools cannot support a curriculum that is sufficiently broad to meet the contemporary academic and career oriented needs of students. The commitment of the community and school leaders may have a greater impact on the type of curriculum and extracurricular programs than does the size of the school.

Cotton (1996) suggested a number of reasons for the exceptional performance of students in small schools. This study indicated that there is more active involvement between the community and the small school. Students and school personnel know each other to a greater degree than is possible in a large school, and incidence of parent involvement is higher. Teachers and students seemed to have a stronger sense of personal involvement and participation in learning. Research on instructional practices in small, rural schools illustrates that teachers are more likely to develop teaching teams, work with multiage grouping, promote cooperative learning, and individualize performance assessments.

A community school is a resource for lifelong learning. The small, rural school provides the focus of a wide range of services including school related activities and a center for community programs. This may include such services as using the school as a voting precinct; providing adult education offerings; holding community sports programs; locating rural library services in the school building; and holding agricultural activities, public forums, and other similar activities. Use of the school facilities by the public enhances public pride, encourages community participation, promotes parental involvement, and reduces vandalism of school property. A study

Increasing student (and teacher) safety includes curricular approaches such as conflict resolution and peer mediation; staffing additions such as school safety officers; and facilities modifications such as metal detectors, lighting and alarm systems, two-way communication systems with classrooms, and limiting access to entrances monitored electronically or by personnel.

School Improvement

With the rapid changes in society, the explosion of knowledge, and the advent of the Information Age, schools must continually engage in program analysis and improvement. In those schools accredited by the regional associations affiliated with the National Study of School Evaluation (NSSE), periodic self-study and external review are a regular part of school life. As school reform measures pass in each state, similar requirements are mandated for all schools. For example, in December 1995, the Tennessee State Board of Education passed a rule requiring that all schools in the state develop a plan for continuous improvement including improvements in the curriculum, as well as, school facilities. The intent of the rule is to help schools better serve students and their communities. The State Board of Education policy stated that:

> (a) Each local board of education shall develop, maintain, and implement a long-range strategic plan which addresses at least a five-year period of time. The plan shall be updated every two years and include a mission statement, goals, objectives and strategies, and address the State Board of Education master plan.
>
> (b) Each local board of education shall have each school under its jurisdiction develop, maintain, and implement a school improvement plan. The plan shall be updated every two years and include areas such as curriculum, instruction, professional development, and community partnerships, and address the long-range strategic plan of the local board of education (TSIP, 1996).

Although the above mentioned requirements apply to Tennessee, similar action is being taken by a number of state boards and policy making bodies.

by Sun, Hobbs, and Elder (1994) found that parental involvement is higher in rural areas than in urban communities. Even when parent participation is high, there continues to be challenges associated with providing comprehensive educational offerings in rural situations. Some of the challenges of small rural schools include the isolation of the community; limited job opportunities; the perceived value of education; lack of exposure to multicultural experiences; and the absence of museums, art galleries, comprehensive libraries, and other such benefits (Capper, 1993).

A school district with several small schools provides opportunities for greater numbers of students to participate in extracurricular activities and events. Indeed, students in small schools are more likely to be involved in a greater variety of activities, and to hold leadership positions in a diversity of organizations and clubs. In relatively large schools, a smaller percentage of students have an opportunity to participate in athletics, other extracurricular activities, and leadership roles in clubs or organizations. There is no easy answer to the question of the "best" enrollment structure for schools. A number of complex issues such as program cost, curriculum offerings, financial support, facility revitalization, technological advantages, and other similar considerations influence curricular and extracurricular opportunities for students.

Quality schools are safe schools. According to a study conducted by the National League of Cities (1994), schools in small, rural communities experienced a 38 percent increase in school violence from 1989-94. Recent evidence indicates a continuation of rising crime rates in rural schools including student ambush of fellow students and teachers in Tennessee, Kentucky, Mississippi, Arkansas, and Pennsylvania and recent discovery of kill lists in several Tennessee school districts. The societal ills of easy access to weapons, excessive violence in the media, alcohol and other substance abuse, and dysfunctional families are no longer urban specific.

The development of a school improvement plan is based on an analysis of the total school. This begins with a statement of mission and beliefs concerning student learning which serve as benchmarks in the school improvement planning process. A comprehensive needs assessment identifies differences between educational goals for students and actual student performance and provides an information base for prioritizing student needs. Assessment data which are useful include: enrollment figures; grade distribution; retention rates; test scores; discipline referrals; attendance and transfer records; parent information; financial records; availability of materials and equipment; facility needs; feedback from parents and community members; and professional research and literature.

After data are collected, organized, and synthesized, a consensus technique involving parents and other stakeholders assists in reaching decisions about data utilization and curriculum planning. A school's curriculum improvement plan should specify knowledge, skills, content, and attitude expectations for students. Individual plans for teachers at various grade levels and curricular areas should be developed and linked to the overall school improvement plan and to the state-developed curriculum frameworks. Facilities needs, identified as part of the process, are communicated to the superintendent and board of education.

Making Decisions About School Facilities

The condition, design, and serviceability of the school plant are crucial concerns in the process of curriculum development and school improvement. One may argue that most decisions regarding the construction, renovation, and closing of rural schools are based primarily on issues of population changes and initial costs of facilities. However, the primary purpose of those facilities has always been, and will continue to be, the delivery of educational services, both

curricular and extracurricular. Frequently, decisions which appear cost-effective in the short term evolve into major challenges for administrators, teachers, and students as they go about their daily tasks of teaching and learning. In many instances, existing school buildings are obsolete for newer instructional trends and technological innovations. Those planning new facilities must incorporate increased flexibility in the design of buildings. Plans must consider present, as well as, anticipated curriculum needs and enrollment growth. Buildings that do not accommodate existing programs should undergo renovation or new facilities must be provided.

To assist rural policy makers in analyzing their local facility needs, AEL created a "Rural School Facility Checklist." Nine of the twenty items on the checklist refer to curricular and extracurricular considerations.

- Educators, community members, and students work together to identify needs for any new construction or renovation.
- The location of new facilities encourages use by the community.
- New construction or renovation plans accommodate disabled persons in the community.
- The facility includes such areas as meeting rooms—separate from areas used by students—available to community members during the regular school day.
- The school helps provide the community with access to communications technology.
- The school helps meet the leisure, recreational, and wellness needs of the community.
- The school actively seeks opportunities to use the community as part of its curriculum.
- The learning resource center/library is designed with the community clearly in mind.
- The school is, or will be, small enough to serve its students and community well. (Harmon and others, 1997)

There are certain questions one should consider when developing criteria for determining school facility renovation or discontinuing the use of an existing building. They include:

- Is the school under consideration needed in its present location?
- Does the building have structural defects that cannot be corrected in a cost-effective manner?
- Is the school educationally obsolete?
- Is the facility safe for students, school personnel, and others who may use the facility?
- Does the facility accommodate extracurricular programs?
- Is the school site adequate for present usage and future growth?
- Is there adequate space in the facility for curriculum and program needs?

Answering these questions helps school personnel, policy makers, and other interested groups make sound decisions about providing adequate facilities that meet curriculum and extracurricular needs. A primary purpose of the school facility is to promote effective learning among students; i.e., a school that meets the academic, physical, psychological, and social needs of students and protects the health and safety of all participants.

Program Areas Having Particular Implications For School Facilities

The school plant and other facilities should support the educational program by providing space and configurations appropriate for their intended use. Each type of learning activity has different demands on learning spaces. Large group activities demand a spacious area suitable for multimedia presentations. Individualized activities need space for independent, self-directed work; small group needs are met in areas equipped with tables. Spaces for experiential, student participation, hands-on learning may need special furnishings and equipment both for instruction and student safety (Council of Educational Facility Planners, International, 1996).

The Americans with Disabilities Act (ADA) requires that all schools provide access for persons with physical disabilities. Frequently, renovations are initiated in an effort to provide access to building areas through the construction of ramps, railings, movable seats on stairways, accessible water fountains and restrooms, automatic doors, doors wide enough for wheel chairs, and elevators. Laboratory classrooms need specialized modifications. All new facilities are designed to meet ADA requirements including elevators for multi-story facilities.

Early Childhood Programs. Most states mandate kindergarten and support limited programs for three and four year old children. In Tennessee, state law requires that classrooms

for kindergarten and other early childhood programs be located at ground level and have other specialized safety features. Quality facilities provide an inviting learning center with an activity-oriented environment for play, creative activities, and teacher-directed projects, as well as, multi-use spaces equipped with low sinks, counters, and part carpet/part vinyl floor covering. Restrooms in or near each classroom are necessary to minimize class disruptions. Windows should be low enough for children to view natural outdoor settings. Meeting these guidelines is part of the planning process for a new facility, but it creates major complications when attempting to renovate upper-grade level space for use by kindergarten and other preschool programs. Frequently, rural school systems solve this dilemma by purchasing portable classrooms with restroom facilities for use by kindergarten and other early childhood classes. By installing a fairly inexpensive ramp, the state requirements for accessibility and student safety can be met.

Students with Multiple Disabilities. While inclusion is becoming more prevalent, school facilities serving students with multiple physical disabilities must provide accommodation beyond the basic ADA guidelines for all facilities. Comprehensive development classrooms typically include bathing and laundry facilities; tile floors with drains; and independent living centers, including cooking facilities. Braille or audio signs for the visually impaired and flashing alarms for the auditory impaired add to the independence of students.

Middle School Organization. Middle schools are known for their team approach to teaching and learning. Typically, in a middle school, four or five classrooms are located together. A group of students (100-125) moves among these classrooms and teachers throughout the day. Unlike a traditional junior high school in which classrooms for specific subjects (i.e. Science) were grouped together, the middle school organization places one science room in each of these areas

of the building. Whereas, a traditional classroom with individual desks and carpeted floor might be sufficient for mathematics, language arts, and social studies, the science room requires plumbing, gas, and wiring in addition to a tile floor and tables. Middle school exploratory courses require designated spaces equipped for fine arts and crafts, technology education, career exploration, and related arts.

Technology. For teachers to effectively integrate technology into daily instruction, they must be trained in its use and have appropriate, operable equipment in their classrooms. In many older rural schools, the typical classroom has two electrical outlets, neither of which is equipped with a ground plug. While using an adapter or breaking off the ground prong might have worked for one overhead projector, the advent of multimedia teacher stations and multiple computers for student use now necessitate the installation of multiple outlets. Additionally, this technology requires some method of accessing the Internet, either a fiber cable or a telephone modem. In those schools using interactive television systems to supplement curricular offerings, rooms must be totally re-equipped with wiring, equipment, and sound-proofing. In some cases, one school may have four or more input systems for distance learning (satellite dish, cable, Internet, closed network) which may be operated separately or integrated into a single system. Consideration might be given to installing wireless networks in schools to support access to technology services, particularly in older buildings (ASCD, 1998).

Laboratory Classrooms. For language, child development, commercial foods, agriculture, auto mechanics, computer, science, driver education, and other vocational laboratories, concerns include safety; access for all students; integration of state-of-the-art technology; and maintenance and periodic upgrades of equipment and software. With the

increase in laboratory science courses required for graduation, curriculum-wide emphasis on computer literacy and advanced applications, and School-to-Career emphasis on all students having applied courses in their chosen career cluster, the number of students being served in laboratory settings is increasing dramatically. Laboratory classrooms require secure storage, multiple electrical outlets, plumbing with floor drains, safety showers and eye washes, separate ventilation systems, chemical-resistance surfaces, climate-control for heat-producing machines, and specialized equipment for students with handicapping conditions.

Library/Media Center. A library is no longer merely a collection of print and non-print (films, video tapes, records) media but rather an interactive space in which students read, conduct electronic searches, dramatize literary works, and explore literary interests and in which teachers prepare instructional materials and conduct research in preparation for teaching. It is the focal point for the curriculum. The size of the learning media center should be appropriate for the school enrollment and accommodate a diversity of print, non-print and software holdings. The facility should include a main reading area with tables and comfortable chairs, a classroom area, an audio/visual area, independent study spaces, office space, workrooms, and storage. The shelving should be adjustable, and arranged to serve the age level and size of the students. Library/media centers need multiple computers (with adequate wiring and Internet access), multimedia presentation television centers, workrooms, and, ideally, a video classroom for distance learning and the production of student programming. Media is used throughout the quality school requiring adequate ventilation and climate control for heat-producing equipment such as computers and projectors.

The Arts. Until recently, many rural schools had few if any organized courses in the arts

Art and music (K-8) were provided by regular classroom teachers either as a part of other units of study or as fun activities. The recent trend of hiring music and art specialists for elementary schools creates a need for specialized, designated spaces. While many of these teachers currently provide *music/art a la cart*, quality programs await music rooms with pianos and other instruments, sound equipment, risers, and sound proofing and art rooms with tables, tile floors, display areas, plumbing, and storage areas. At the middle and high school level, quality arts programs require facilities for drama (auditoriums or theaters with stage, audience seating, sound and light systems with a catwalk and control booth, dressing rooms, storage, ventilation, heavy-duty plumbing, extra electrical outlets, curtains, and stage backs); dance (wooden floors, sound and light systems, storage, dressing rooms); visual arts (kilns, tables, tile floors, display areas, plumbing, ventilation, and storage areas); and music (band and chorus rooms with practice rooms, instrument storage, risers, specialized furniture, instrument storage, and music storage).

Outdoor Education. At all grade levels, outdoor education on school campuses is becoming popular. Whereas in the past teachers planned one or two field trips a year to natural areas, the current trend is toward establishing on the school grounds natural areas which can supplement classroom instruction as appropriate without the long-range planning, transportation, liability, and time concerns of field trips. These natural areas frequently include nature trails with marked native specimens, obstacle courses, amphitheaters, outdoor classrooms, butterfly gardens, wildflower gardens, ponds, and picnic facilities.

Physical Education. Most physical education facilities at rural schools provide multiple services for physical education; interscholastic competitions; and community use for dances, adult and youth sports leagues, and meetings. Most rural elementary and middle schools have

gymnasiums used for teaching physical fitness and a variety of team and individual sports; they may include specialized features such as a climbing wall. These schools have playground equipment and serve as community parks after school hours and in the summer. At the secondary level, gymnasiums tend to be larger and grander, with more emphasis on their use for interscholastic competitions than for physical education. Larger high schools usually have a football field and perhaps a track. Other facilities provided for student and community use may include tennis courts; outdoor paved areas for basketball and volleyball; and fields for soccer, baseball, and softball. While frequently included in preliminary school designs, few rural school facilities actually include swimming pools.

Community Education, Summer and Afternoon/Evening Programs. Rural school facilities should be accessible beyond the school day and year. Appropriate programming appealing to a large number of community members and year-round programs for youth increase the community ownership in its schools. Facility adaptations necessary to accommodate these programs include year-round climate control; security gates to limit access to selected areas of buildings; restrooms in areas of buildings used for these programs; adult-sized seating; and access for persons with physical disabilities. Community programming suggested by the Mott Foundation (1998) includes adult literacy and job retraining; leisure activities; cultural and fine arts events; social and health services; and general use as multi-purpose community centers.

Diverse Programming for Small Populations. Small rural schools face the challenge of providing diverse offerings to small groups of students. To deliver specialized offerings, schools must be willing to experiment with alternative delivery models. These might include such approaches as distance learning with other schools, higher education institutions, or vendors

utilizing a variety of technologies; shared teachers; work-based learning; private support for some programming; articulated courses; or transportation of students to specialized classes.

A Survey of Selected Rural Schools in the

Upper Cumberland Region of Tennessee

To project future facilities needs and enhance curricular and extracurricular offerings, it is necessary to assess present capabilities. Phelps, Peach, and Reddick (1998) conducted a survey regarding the relationships between facility conditions and curricular and extracurricular opportunities. The schools selected were identified from areas classified as rural by the Tennessee Rural Economic and Community Development Agency. The sample of 75 schools represented elementary through high school grade levels. Enrollment ranged from 216 through 840. A total of sixty-two principals (83%) returned completed surveys. The study collected certain directorial information and focused on four open-ended questions:

- What characteristics of your facility are highly compatible with your curricular and extracurricular offerings?
- What characteristics of your facility limit your ability to provide desired curricular and extracurricular offerings?
- What construction/remodeling of your facility has been accomplished in the past five years in response to program needs?
- What major facility modifications are needed to accommodate specific curricular or extracurricular needs?

The resulting data provide a profile of the present status of rural school facilities and their accommodation of various curricular and extracurricular offerings in one rural region. The region consists of a 20 county area, primarily rural, but including no urban centers. The region is home to three remaining K-12 schools and approximately twelve elementary schools with fewer than 100 students. An analysis of the data from the survey forms follows in Table I.

Table I

Compatibility of Curricular and Extracurricular Offerings with Rural School Facilities

Number/Percent of Responses		Areas of Compatibility
55	89%	Appropriate Curriculum for Facility Safe Location; Positive School Climate
51	82%	Gymnasium, Music Rooms, Auditorium Central Location
49	79%	Technology Service; Computer Laboratory
47	76%	Internet Operable
44	71%	Science Laboratory
37	60%	Adequate Classroom Space Diverse Extracurricular Program
36	58%	Small Class Size
33	53%	Clean Facilities Good Library/Learning Media Center
31	50%	Large Campus Areas; School Site
26	42%	Vocational, Career, Technical Programs
21	34%	Community Use Athletic Fields; Band Practice Area
18	29%	State of Maintenance
17	27%	Team Teaching; Classroom Pods; Open Space

The principals indicated the level of compatibility of the curricular and extracurricular offerings with their schools' facilities was generally positive. Class size is usually a matter of concern, but 58 percent reported they enjoyed small class size. However, this indicates that 42 percent had large class size and possibly crowded conditions in their schools. The high rating of internet reflects the culmination of a two-year struggle to bring all schools in the state on-line. There were several areas of high compatibility. These include a safe school and positive climate, an important characteristic for effective schools. Other highly favorable areas were technology, meaningful extracurricular activities, satisfaction with curriculum offerings, and school location.

Table II

Limitations of Facilities in Providing Curricular and Extracurricular Offerings

Number/Percent of Responses		Areas of Limitations
41	66%	Poor Maintenance
36	58%	Overcrowded Classrooms Inadequate Number of Classrooms Lack of Space for Extra Activities
32	52%	Lack of Instructional Materials, Supplies
31	50%	Site Too Small
29	47%	Inadequate Library/Learning Media Center
28	45%	Lack of Science Laboratory
27	44%	Lack of Adequate Computer Laboratory Inadequate Wiring/Technology
23	37%	Inadequate Number of Teachers/Personnel
21	34%	Lack of /Limited Art and Music Space
18	29%	Gymnasium Too Small
14	23%	Rural Location
12	19%	Inadequate Building Infrastructure/ Topography
6	10%	Lack of Parking Inadequate Safety Features/Fire Codes Violations

Although there were a number of areas in which positive responses were given, Table II provides information about the limitations of existing facilities that restrict programs and services. Lack of space and over-crowded classrooms are a problem. In some of the older buildings, wiring and other infrastructure cause concern and limit optimal utilization of technology. Science laboratories, computer laboratories, and learning media centers need major improvement. Also, over one half of the respondents cited the shortage of instructional equipment and materials. Interestingly, inadequate maintenance was mentioned in both Tables I and II. The care and upkeep of buildings are critical to the curriculum and optimum facility utilization. A well-equipped facility, aesthetically pleasing, and adequately maintained enhances the curriculum, is motivational to students and school personnel, and projects a positive image to the community.

Table III
Construction or Renovation of Rural Facilities
1993-98

Number/Percent of Responses		Areas of Limitations
46	74%	Major Remodeling Projects
38	61%	Classrooms Constructed
31	50%	New Equipment for Extracurricular/ Community Programs
24	39%	New Facilities Planned
21	34%	Wiring Improved
20	32%	Minor Remodeling Projects
16	26%	Improvements to Security Systems
15	24%	Added Portable Classrooms
14	23%	No Changes to Facilities
12	19%	Roof Replaced/Major Repairs New Facilities Constructed
11	18%	Gymnasium Improved Parking Areas Improved
9	15%	Improvement to Band/Music/Art Facilities
8	13%	Change of Grade Structure

Construction or renovation of school facilities during the past five years is presented in Table III. In the last five years, the condition of rural school facilities received considerable attention. About 40 percent of the principals said that new facilities were in the planning stages and about 20 percent of the sixty-two schools had new facilities constructed. Gene Thruman (1998), a former school superintendent now directing marketing of school-based projects for an architectural firm in Tennessee, reported that approximately one half of the 137 school districts in Tennessee are involved in some phase of facility improvement. This investment is in the millions of dollars. Renovation and retrofitting to allow increased technology implementation is occurring in an even greater percentage of the schools. The 1998 average cost per square foot for school construction in Tennessee is approximately $75.00. The level of activity in Tennessee is consistent with nation-wide trends. The American School & University's 23rd annual Official

Education Construction report showed that 1996 was a record year for new school construction and renovation projects with a total exceeding18 billion dollars. In rural Tennessee, curriculum specific facilities were common in projects conducted in the past five years.

Table IV
Construction Features in New and Remodeled
Rural School Facilities 1993 –1998

Features	New Construction		Major Renovations		Minor Renovations	
	#	%	#	%	#	%
Art Rooms	12	100%	11	24%	3	15%
Auditoriums	12	100%	8	17%	6	30%
Computer Centers	12	100%	31	67%	14	20%
Gymnasiums	12	100%	28	61%	10	50%
Language Labs	12	100%	9	20%	3	15%
Library/Media	12	100%	30	65%	13	65%
Music Rooms	12	100%	16	35%	6	30%
Outdoor Athletic Areas	12	100%	34	74%	16	80%
Parking Lots	12	100%	19	41%	6	30%
Science Labs	12	100%	15	33%	4	20%
Tennis Courts	12	100%	6	13%	2	10%
Swimming Pools	1	8%*	--		--	
TOTAL SCHOOLS**	**12**		**46**		**20**	

*Proposed
**Some schools had projects in two or more categories.

Construction features reported by the 62 rural school principals in the Phelps, Peach, and Reddick study (1998) during the past five years (1993-94 through 1997-98 school years) are summarized in Table IV. Twelve principals moved into new school facilities each of which had all of the 11 features listed in the table. Major renovations (projects costing $5000.00 or more) were completed in 46 schools. Improvements listed frequently included projects such as outdoor athletic areas, renovated computer centers, library and media complexes, and changes in gymnasiums. Minor renovations (projects costing less than $5000.00) included changes in

outdoor athletic fields, computer centers, and library and media areas. Several respondents reported improvements in music and art facilities.

The principals provided a list of facilities needs to accommodate future curricular and extracurricular offerings. The list is provided in alphabetical order to keep from implying a priority listing. This list agrees with the data in Tables II and IV.

Additional Classroom Space
Additional Remodeling
Art Laboratories
Auditorium/Theater
Computer Laboratories and Upgrades
Heating/Cooling Improvements
Language Laboratories
Library/Learning Media Center
Playground Space and Equipment
Teacher Workspace
Additional Extracurricular Opportunities
Additional Specialized Personnel
Appropriate Storage Areas
Community Education Programs
Dressing Rooms for School Events
Career/Vocational/Technical Programs
Laboratories for Science
New Facilities
Student Lockers/Commons Areas
Wiring for Technology

Conclusions

Rural school facilities are more than buildings. They are instructional tools which facilitate the delivery of quality educational programming; focal points of community life; and the strongest link between schools and communities. While generic classrooms equipped with desks and chalkboards once sufficed for most educational programs, the technological dependence and increasing sophistication of curricular content require specialized spaces which match the educational goals of the activities for which these spaces will be used. These specialized spaces require enhanced infrastructure (plumbing, electrical, electronic) if they are to contribute to, rather than hamper, student learning. In order to justify the expense of construction or major renovation of rural school facilities to accommodate emerging curricular and extracurricular offerings, a strong case must be made for retaining smaller schools which serve defined rural areas rather than

consolidating multiple facilities into one facility. The reversing population dynamics evidenced by overcrowded rural schools assist one in making the argument to renovate or rebuild on existing sites. However, in the opinion of the authors, decision- makers cannot jeopardize the future of rural youth by maintaining small rural schools that do not accommodate instructional technology, specialized curricular areas, and diverse extracurricular offerings.

Rural school facilities that are unsafe, unclean, and incompatible with curricular expectations of the 21st century testify that those communities do not value their youth. Rural communities must be willing to work collaboratively to provide school facilities that meet emerging educational needs of the entire population (pre-school through adult) or accept the inevitability of facilities consolidation. If small rural schools are educationally adequate and supported by the entire community, then there is no impetus to consolidate. Given the costs of educational adequacy in the 21st century, communities must use innovative approaches to program delivery if they wish to preserve, for acceptable costs, all that is good about small rural schools. Attractive, well-maintained, rural schools with quality curricular and extracurricular programming for all ages are investments in community. An attractive, modern building is not a quality school; curricular and extracurricular offerings determine educational quality. However, providing educational quality in out-dated facilities is difficult, if not impossible. Communities that can truthfully boast about their schools are attractive to persons and companies seeking relocation in traditional communities. These new residents add to the local tax base, provide additional employment opportunities for local residents, and add to the cultural diversity of the

community. In turn, schools (and communities) will benefit from increased funding, economic vitality and opportunity, and human resources that enhance school programs.

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